IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-2 (Canceled)

3.(Currently Amended) A method of operation of a networked device, including device comprising the acts of:

transmitting ~~or receiving (104)~~ from a first device to a second device a request for a simple device description message ~~(230)~~ of defined length from a first device to a second device, the simple device description message being in the form of a token-compressed message compressed from a human-readable message ~~format,~~ format;

including by the second device a device type value representing a type the second device in the simple device description message; and

transmitting from the second device to the first device the

simple device description message ~~including a device type value~~

~~representing the type of the other device~~; the device type value

being selected from a device type hierarchy having predetermined

top level elements including a controller device type ~~(52)~~ and a

basic device type ~~(54)~~, and at least one further level ~~(68)~~ of

subsidiary device types depending from the basic device type ~~(54)~~

and inheriting properties of higher level device types on which the

subsidiary device type depends, but not including any further level

of subsidiary device types depending from the controller device

type ~~(52)~~.

4. (Currently Amended) ~~A~~ The method according to claim 3

further including the ~~steps~~ acts of:

establishing ~~(102)~~ ~~the~~ an address of at least one other

device;

sending ~~(104)~~ a simple device description query message to the

~~other device or one or more of the other devices~~ at least one other

device requesting a simple device description;

receiving ~~(106)~~ from the at least one other device ~~or devices~~

the simple device description message of the at least one other device.

     5.(Currently Amended) A The method according to claim 3 further comprising the acts of:

     sending (108) an extended device description query message to the at least one other device or one of the other devices requesting an extended device description from the other devices at least one other device; and

     receiving (110) from the at least one other device or the one of the other devices an extended device description of variable length.

     6.(Currently Amended) A The method according to claim 3 wherein the networked device is a controller device (2) having a list (24) of device types that the controller can control.

     7.(Currently Amended) A The method according to claim 6 further including the act of:

     determining the an extent to which the controller can control

the at least one other device ~~by~~ in the list of device types that

can be controlled by the controller;

wherein the determining act is performed by the act of

determining ~~the~~ a lowest level of device type that either is the

device type of the at least one other device or is a higher level

device type from which the device type of the at least one other

device depends, ~~in the list of device types that can be controlled~~

~~by the controller~~.

8.(Currently Amended) ~~A~~ The method according to claim 7

further including the acts of:

receiving ~~(120)~~ a controller query message from another device

including ~~an~~ a requested device type value to request whether the

controller is able to control a device of the requested device

type; and

responding ~~(122)~~ with a controller response message including

a device type value representing the lowest level of device type in

the list of device types that either is the requested device type

or is a higher level device type from which the requested device

type depends.

9.(Currently Amended) A The method according to claim 3,

comprising further comprising the act of:

receiving a simple device description query message from

another device requesting a simple device description; and

transmitting to the other device the simple device description

message (230) of fixed length.

10.(Currently Amended) A The method according to claim 9

wherein the predetermined top level elements in the device type

hierarchy further include a composite device type, and the

networked device is of the composite device type having the a

functionality of an integer number of other devices, the method

further comprising the act of:

responding to a received simple device description query

message by sending a simple device description message (230)

including the device type value (232) representing the device as a

composite device and further an integer sub-device number being the

number (234) of other devices.

11. (Currently Amended) A system, ~~comprising~~ comprising:

a plurality of networked devices ~~(200)~~ each having a

transceiver ~~(8)~~ for sending and receiving network messages, the

networked messages including device description messages

identifying ~~the~~ a device type of a networked device; wherein

each networked device has a predetermined device type selected

from a device type hierarchy having predetermined top level

elements including a controller device type ~~(52)~~ and a basic device

type ~~(54)~~, and at least one further level ~~(68)~~ of subsidiary device

types depending from the basic device type and inheriting

properties of higher level device types on which the subsidiary

device type depends, but not including any further level of

subsidiary device types depending from the controller device type;

at least one of the networked devices is a controller device

~~(2)~~ with ~~the~~ a controller device type ~~(52)~~; and

at least one of the networked devices is a controlled device

~~(4)~~ with a device type of the basic device type ~~(54)~~ or a device

type ~~(62,64,66,)~~ depending from the basic device type ~~(54)~~.

12. (Currently Amended) ~~A~~ The system according to claim 11,

wherein the plurality of networked devices ~~include~~ includes:

    at least one simple device without the capability to

decompress messages ~~and~~, the at least one simple device

interpreting directly compressed simple device description query

messages; and

    at least one complex device including a message decompression

arrangement ~~(184)~~ for decompressing the messages and a message

interpreter for interpreting the decompressed messages.

    13.(Currently Amended) ~~A~~ The system according to claim 11, ~~or~~

~~12~~ wherein the predetermined top level elements further include a

composite device type;

    wherein the system includes at least one networked device of

the composite device type having ~~the~~ a functionality of a

predetermined number of other devices, the predetermined number

being an integer greater than or equal to 2;

    and wherein each of the at least one networked device of the

composite device type responds to an incoming device query message

requiring a simple device description by sending a simple device

description ~~(230)~~ including the device type ~~(232)~~ as a composite

device and a sub-device number (234) representing the predetermined

number of other devices.

14.(Currently Amended)   A networked device, including:

a transceiver (8) for sending and receiving messages; and. and

a message handler (26,182) arranged to send or receive simple

device description message of defined length, the simple device

description message being in the a form of a token-compressed

message compressed from a human-readable message format, the

message including a device type value representing the a type of

the other a further device; the device type value being selected

from a device type hierarchy having predetermined top level

elements including a controller device type (52) and a basic device

type (54), and at least one further level (68) of subsidiary device

types depending from the basic device type (54) and inheriting

properties of higher level device types on which the subsidiary

device type depends, but not including any further level of

subsidiary device types depending from the controller device type

(52).

15.(Currently Amended) A~~ ~~The networked device according to claim 14,

wherein the message handler is arranged to carry out the ~~steps~~ acts of:

establishing ~~(102) the~~ an address of ~~at least one other~~ the further device;

sending ~~(104)~~ a simple device description query message to ~~another~~ further device requesting a simple device description;

receiving ~~(106)~~ from the ~~other~~ further device the simple device description message of fixed length including a device type value representing ~~the~~ a type of the ~~other~~ further device and a field indicating whether an extended device description is available;

and further arranged to optionally carry out the ~~steps~~ acts of:

testing the simple device description message to determine whether an extended device description is available;

sending ~~(108)~~ an extended device description query message to the ~~other~~ further device requesting an extended device description from the ~~other~~ further device; and

receiving (110) from the other further device an extended
device description of variable length.

16. (Currently Amended)   A The networked device according to
claim 14 wherein the message handler (26, 182) is arranged to carry
out the steps acts of:

receiving a simple device description query message from
another device requesting a simple device description; and

sending to the other device the simple device description
message of fixed length, the simple device description message
being in the a form of a token-compressed message compressed from a
human-readable message format.

17. (Currently Amended)   A The networked device according to
claim 16 further comprising a memory (14) storing a predetermined
simple device description message precompressed from human readable
format, wherein the message handler is arranged to read the
predetermined simple device description message from the memory and
send it through the transceiver in response to an incoming device
query message.

18. (Currently Amended) A̶ The networked device according to claim 17 wherein the networked device is a controller device ̶(2̶)̶ comprising a memory ̶(14̶)̶ containing a list of device types that can be controlled by the controller for determining the extent to which the networked device can control another device of known device type by determining t̶h̶e̶ a lowest level device type in the list of device types that can be controlled by the networked device that either is the known device type or is a higher level device type from which the known device type depends.

19. (Currently Amended) A̶ The networked device according to claim 18 wherein the message handler is arranged to receive a controller query message from the another device including a̶n̶ a requested device type value to request whether the controller is able to control a device of the requested device type; and to respond with a controller response message including a device type value representing the lowest level of device type in the list of device types that either is the requested device type or is a higher level device type from which the requested device type

depends.

20.(Currently Amended) A computer readable medium containing

a computer program defining a device type hierarchy having

predetermined top level elements including a controller device type

(52) and a basic device type (54), and at least one further level

(68) of subsidiary device types depending from the basic device

type (54) and inheriting properties of higher level device types on

which the subsidiary device type depends, but not including any

further level of subsidiary device types depending from the

controller device type (52), the computer program being arranged to

cause a networked device (2,4) to send and/or receive simple device

description messages (230) including the device type selected from

the device type hierarchy.

21.(Currently Amended) A The computer program readable medium

containing according to claim 20 for controlling a controller-type

networked device, the networked device having a transport stack and

an application, the computer program comprising:

code implementing a transport adaption layer (180) for

interfacing with the transport stack;

code implementing an application programming interface ~~(186)~~

for interfacing with the application; and

code implementing a messaging layer ~~(182)~~ including the

capabilities of sending and receiving messages in a token-encoded

human readable messaging format, the code being arranged to cause

the networked device:

to ~~recognise~~ recognize incoming device query messages

requiring a simple device description response and to provide a

simple device description response including a device type of

controller device type;

to respond to an incoming controller query message querying

whether the networked device can control a predetermined device

type by responding with the lowest level of device type in the list

of device types that can be controlled by the networked device that

either is the predetermined device type or is a higher level device

type from which the predetermined device type depends; and

to carry out the ~~steps~~ acts of:

sending a device query message to another device;

receiving a response from the other device indicating the

device type of the other device, the device type being selected

from a device type hierarchy having predetermined top level

elements including a controller device type and a basic device

type, and at least one further level of subsidiary device types

depending from the basic device type and inheriting properties of

higher level device types on which the subsidiary device type

depends, but not including any further level of subsidiary device

types depending from the controller device type;

   determining the extent to which the networked device can

control the other device by determining the lowest level of device

type that either is the device type of the other device or is a

higher level device type from which the device type of the other

device depends, in the list of device types that can be controlled

by the networked device; and

   controlling the other device with the functionality of the

determined lowest level of device type by sending control signals

selected from a list of control signals appertaining to the

determined lowest level of device type.

   22.(Currently Amended)   A~The computer ~~program~~ readable

medium containing arranged to cause a networked device to carry out

the method of any of claims 3 to 10.